

APPENDIX A. ISSUES, QUESTIONS AND CONCERNS FROM PUBLIC MEETINGS

ISSUES:

Human health and safety

A total of seven questions (Table A1) were received regarding human health and safety of this project. They concerned drift of pheromone flakes and affects on fish and people who ate fish. How long pheromone would be present after it was applied and whether there were any adverse effects. Btk was questioned as to whether it affected people, children or pets.

The response explained there are no known adverse affects from pheromone as it is the chemical that the female produces to attract only male moths to her to mate. The effect on fish and people, who ate the fish, explained that the flakes are applied at four flakes per square foot, that consumption by fish may be minimal and there is no effect to fish and to human health. The response to Btk explained that Btk is a naturally occurring soil bacterium, that minor eye or nasal irritation may occur to a person directly exposed to Btk, and there is no long-term health effects to people or pets. The response explained that Btk is used to manage other insects, primarily lepidopterans. Risk of a plane accident and measures that are taken to provide safe application were discussed at the meetings.

Table A1. Summary of questions regarding Human Health and Safety at the Public Meetings.

Proposed Treatment Site	Treatment	Questions addressed:
Brownsburg	Mating Disruption	What about drift? Will the pheromone flakes get into farm ponds and effect the fish and the people who eat them? I'd like a guarantee that none will get into my pond. If this is harmless, why is there a concern?
Pierceton	Mating Disruption	None
Syracuse South/Lake Wawasee	Mating Disruption	None
Cedar Lake	Mating Disruption	How residual are the flakes? What are the adverse effects of this treatment? Why would anyone have a problem or an objection to this?
Kendallville	Btk	Does Bt have any affect on humans, pets, or other animals?

Nontarget and environmental effects

For nontarget effects, questions (Table A2) inquired about pheromone effect on streams, ponds and fish and Btk effect on humans, pets and animals. The questions on environmental effects were concerned with the health of trees, the residual of pheromone flakes and whether birds ate gypsy moth. There was no major concerns or questions regarding adverse effects to threatened and endangered species.

The response explained that Btk and pheromone flake would have no effect on wildlife, plants and streams. Btk would have an affect on other lepidoptera larvae but not on other nontarget organisms.

The response explained the effect of gypsy moth defoliation on forests, both urban and rural, and further explained the effect on the urban environment of gypsy moth epidemics.

The response to pheromone flake questions is addressed above (see Human Health and Safety).

Table A2: Summary of questions regarding Nontarget and Environmental effects at the public meetings.

Proposed Treatment Site	Treatment	Questions addressed:
Brownsburg	Mating Disruption	Do pheromone flakes effect the pH of water and streams? Will the pheromone flakes get into farm ponds and effect the fish?
Pierceton	Mating Disruption	What will happen to the trees in the Cemetery? They are under stress and would probably die first.
Syracuse South/Lake Wawasee	Mating Disruption	None
Cedar Lake	Mating Disruption	How residual are the flakes? What are the adverse effects of this treatment? Why would anyone have a problem or an objection to this?
Kendallville	Btk	Does Bt have any affect on humans, pets, or other animals? Is there any reason why birds don't eat Gypsy Moth?

Economic and political impacts

Twenty-one questions (Table A3) were asked regarding economic and political impacts. There were questions regarding what the forest management practices would be after an infestation as well as regulatory and quarantine practices. Most questions concerned how the public would be given advance notice of the applications and what time of year the applications would occur. There were a few questions about past applications and whether they had been effective. The cost of the application was questioned and who would pay for it. One person in Kendallville was against treatment of any kind.

The response stated that the treatment cost is approximately \$30.00 per acre for Btk or pheromone flakes and that the cost is shared between the USDA-Forest Service, USDA-APHIS, and the Indiana Department of Natural Resources.

The response to forest management explained the need to maintain the health of the urban tree and rural forest. The management after an infestation would be to return the forest to a healthy state using harvesting and timber stand improvement, and to salvage any timber resource if appropriate.

Regarding the quarantine, the response explained that compliance programs are available for industries to meet the requirements of the quarantine that will allow them to ship or move their products outside the quarantine area. They were also informed of the penalties for non-compliance with the quarantine and that homeowners can self-inspect or have a certified pesticide applicator do the inspection of outdoor household articles if they are making a household move.

The response on notification stated notice would be provided through the media, direct mailing and posting the treatment area. It was emphasized that mailing would be to notify that the treatment would occur within a period of days and that specific, exact dates are not stated because weather does not allow scheduling specific dates.

The discussion on effectiveness of the applications concerned Syracuse and Kendallville because of past treatment experiences. It was explained that the success of the 2000 treatment in Syracuse would not be known until August 2001 and this year's treatment until August 2002. The response explained that the results of the 2000 survey around Syracuse indicated likely success. For Kendallville, it was explained that prior treatments had been successful and achieved their goal. In the earlier treatments the need for a second year of treatment was made because the first application was delayed because of a festival in the Fairgrounds. Delay in the application allowed the caterpillars to develop to a stage where Btk effectiveness may be reduced.

The person who was against the treatment did not live in or near the treatment. Others in the community were not opposed.

Table A3. Summary of questions regarding Economic and Political Impacts at the public meetings.

Proposed Treatment Site	Treatment	Questions addressed:
Brownsburg	Mating Disruption	How long does the pheromone last? What forest management practices do you recommend in quarantined areas? Has your proposal already been decided? How soon will the application take place? How much notice do you give, and how will we be notified?
Pierceton	Mating Disruption	You are both saying that we are going to get this anyway and that we will have the problems eventually so won't we have the damage whether we treat or not.
Syracuse South/Lake Wawasee	Mating Disruption	Regulation is pretty hard to enforce. Basically aren't we in the transition zone? There are training programs for Pest Control Operators and Timber buyers so that helps. Should we notify the radio stations?
Cedar Lake	Mating Disruption	What type of trap count would you need to quarantine a county? How much time would we buy by releasing the pheromone? It looks like it's following the Highway. What are they doing to treat trucks? How much of an area will you cover with the flakes? How long is it before they determine when they will treat? What is the procedure as to whether there will be a treatment? Will there be an advance notice?
Kendallville	Btk	How effective was the treatment at the fairgrounds? What is the chemical used in your mass trappings? What will the spray cost, and how will it be financed? I don't care for the spraying.

Likelihood of success

Twenty questions (Table A4) were asked regarding treatment success and issues related to success. There were concerns that the gypsy moth could have spread outside of the treatment area and were we treating enough acreage. Were there too many egg masses or other life stages and how that would effect the outcome. Questions concerning past effectiveness also would be associated with this topic because if it wasn't effective in the past what would indicate that it would be effective now. Other methods of control were discussed and questioned. Providing traps to the public and whether they could become more involved with treating egg masses or killing caterpillars. There were questions about the eventual movement of gypsy moth into the area and what if anything would the treatments provide.

The response to the questions explained that success is directly linked to what we know about the gypsy moth population in terms of density, area it occupies, and host availability. Also to be effective the treatment has to be carefully selected and applied at the right time and properly. What the management program provided was time for the public to prepare for gypsy moth and for the natural enemies to move with gypsy moth as it enters the state. We generally support any efforts the public can provide to help identify and eradicate the population. However, though traps are available, they may detract from the statewide detection survey and cause information obtained to be misinterpreted.

Table A4. Summary of questions regarding Likelihood of Success at the public meetings.

Proposed Treatment Site	Treatment	Questions addressed:
Brownsburg	Mating Disruption	How did your trap inspections work for our county? Have you seen any evidence of Gypsy Moth southwest of town, especially in the park? Is the area marked on the map the only part of Brownsburg you would spray? What kind of effectiveness do you expect from the treatment? How long has the DNR been doing treatments for Gypsy Moth, and are you actually stopping the spread? In other words, you can't stop Gypsy Moth, only slow their movement. How far will the caterpillars blow? Outside of the area? How far outside the treatment area will you place traps? Who do we call if we find Gypsy Moth around the area?
Pierceton	Mating Disruption	This seems to be moving along the I-80 corridor. What is being done about that? Most comments about what was in the area and where it was located.
Syracuse South/Lake Wawasee	Mating Disruption	Was the treatment successful last year? Do the flakes actually kill the males?
Cedar Lake	Mating Disruption	Is this going to be a cycle or going to be with us forever?
Kendallville	Btk	When would you be applying this spray? If you apply Bt, will you let us know the dates you plan to spray? Could you be more specific about the area to be treated, for instance, the type and number of trees and the acreage? Do you know if the Gypsy Moth has crossed the streets that surround the park? Are egg masses mostly on the trunk or branches, or both? How many males do you have to get rid of in order to stop mating? Are there traps available for landowners to buy? How long have you been trying to contain the population? Was Bt used at the fairgrounds? Do horticultural oils work on the egg masses?

OTHER QUESTIONS AND CONCERNS

Table A5. Summary of questions regarding Other Questions and Concerns at the public meetings.

Proposed Treatment Site	Treatment	Questions addressed:
Brownsburg	Mating Disruption	None
Pierceton	Mating Disruption	None
Syracuse South/Lake Wawasee	Mating Disruption	What life stages did you find in Syracuse? How about larvae? What is your web site and can we link to it? (Town Manager)
Cedar Lake	Mating Disruption	Can we buy traps?
Kendallville	Btk	Can you be more specific about when males and females hatch, fly, and mate? Do you show individual landowners how to wrap and protect their trees? How big is a normal egg mass? Is the population of caterpillars in the trees going to be noticed in June and July? What happens to the moths after they mate? Does Tanglefoot work on the caterpillars? Again, how do the caterpillars move about the trees? When they fall out of the trees, do they fall all the way to the ground? Where do you find the pupa? Can you spray from the ground? Would a helicopter give you better accuracy? Is Gypsy Moth more contained in the Southeast, or is it spreading south from there as well?